

## PATENT COOPERATION TREATY

## PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY  
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>CFO17494WO</b>	<b>FOR FURTHER ACTION</b> See Form PCT/IPEA/416	
International application No. <b>PCT/JP 03 / 10258</b>	International filing date (day/month/year) <b>12.08.2003</b>	Priority date (day/month/year) <b>27.08.2002</b>
International Patent Classification (IPC) or national classification and IPC Int.Cl. <b>C07C13/72, 25/22, 255/52, C07D209/86, 219/02, 471/04, C07F7/12, C09K11/06, H05B33/14, 33/22</b>		
Applicant <b>CANON KABUSHIKI KAISHA</b>		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36. 2. This REPORT consists of a total of <u>3</u> sheets, including this cover sheet. 3. This report is also accompanied by ANNEXES, comprising:	
a. <input type="checkbox"/> a total of _____ sheets, as follows:	<input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). <input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
b. <input type="checkbox"/> a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).	
4. This report contains indications relating to the following items:	
<input checked="" type="checkbox"/> Box No. I	Basis of the report
<input type="checkbox"/> Box No. II	Priority
<input type="checkbox"/> Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/> Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/> Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/> Box No. VI	Certain documents cited
<input type="checkbox"/> Box No. VII	Certain defects in the international application
<input type="checkbox"/> Box No. VIII	Certain observations on the international application

Date of submission of the demand <b>24.03.2004</b>	Date of completion of this report <b>26.11.2004</b>	
Name and mailing address of the IPEA/JP <b>Japan Patent Office</b> 3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japan	Authorized officer <b>SATOKO ANABUKI</b>	<b>4H 8413</b>
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**Box No. I Basis of the report**

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on translations from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
  - ☐ publication of the international application (under Rule 12.4)
  - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the **elements** of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

- ☒ the international application as originally filed/furnished
- ☐ the description:
- pages \_\_\_\_\_ as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ the claims:
- pages \_\_\_\_\_ as originally filed/furnished
- pages\* \_\_\_\_\_ as amended (together with any statement) under Article 19
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ the drawings:
- pages \_\_\_\_\_ as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (specify): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (specify): \_\_\_\_\_

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (specify): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (specify): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. Statement**

Novelty (N)	Claims	<u>4, 9 - 12</u>	YES
	Claims	<u>1 - 3, 5 - 8</u>	NO
Inventive step (IS)	Claims	<u>4, 9 - 12</u>	YES
	Claims	<u>1 - 3, 5 - 8</u>	NO
Industrial applicability (IA)	Claims	<u>1 - 12</u>	YES
	Claims		NO

**2. Citations and explanations (Rule 70.7)**

Reference is made to the following document:

D1:JP 2002-75645 A (KABUSHIKI KAISHA HANDOUTAI  
ENERGY KENKYUSYO) 2002.03.15, CLAIM 1 (FAMILY:NONE)

D2:WO 02/43449 A1 (TORAY INDUSTRIES, INC.)  
2002.05.30, PAGE 35, EXAMPLE 5  
& JP 2002-222697 A & EP 1341403 A1

D3:WO 96/17035 A1 (HOECHST AKTIENGESELLSCHAFT)  
1996.06.06, PAGE 33, BEISPIEL 16  
& DE 4442050 A1 & EP 793699 A1 & CN 1170425 A  
& JP 10-509996 A & ES 2125056 A1  
& US 6329082 A

Documents D1, D2 and D3 mention the 9,9'-spirobifluorene derivatives, 5,5'-spirobi(dibenzosilole) derivatives and the use of these compound(s) as the element of organic luminescence device.

The subject-matter of claims 1 to 3 and 5 to 8 is therefor not novel in the meaning of Art. 33(2) PCT and not inventive in the meaning of Art. 33(3) PCT.

None of these documents describe the spiro compound which has at least one specific condensed polycyclic aromatic group.

None of these documents describe the organic luminescence device, wherein at least a luminescent layer among the layers containing the spirocompound(s) and at least one specific fluorene derivative.

These specific features are not obvious for the person skilled in the art.

The subject-matter of claims 4 and 9 to 12 is therefor novel and inventive.